Specifications of the MS8209 5 in 1 meter		
DC Voltage		
Range	Resolution	Accuracy
400mV	0. 1mV	± (0.7% of reading + 2 digits)
4V	1mV	± (0.7% of reading + 2 digits)
40V	10mV	± (0.7% of reading + 2 digits)
400V	100mV	± (0.7% of reading + 2 digits)
600V	1V	± (0.7% of reading + 2 digits)
Input impedance: 10 M Ohm		
Over load protection: 400mV Range 250V DC or rms AC, 4V-6 00V ranges: 600V DC or rms AV, Max input voltage : 600V DC or rms AC		
AC Voltage		
Range	Resolution	Accuracy
4V	1mV	± (0.8% of reading + 3 digits)
40V	10mV	± (0.8% of reading + 3digits)
400V	100mV	± (0.8% of reading + 3 digits)
600V	1V	± (0.8% of reading + 3 digits)
Input impedance: 10 M Ohm		
Over load protection: 400mV Range 250V DC or rms AC, 4V-6 00V ranges: 600V DC or rms AV, Max input voltage : 600V DC or rms AC		
Frequency range: 40 to 1000Hz,		
Resonse: Average, calibrated in rms of sine wave.		
DC Current		
Range	Resolution	Accuracy
40mA	10uA	± (1.2% of reading + 3 digits)
400mA	100uA	
10A	10mA	± (3.0% of reading + 10 digits)
mA ranges: F500mA/250V fuse (quick acting),10A range: unfused. Max. Input current:mA jack:400mA,10A jack :10A; Voltage Drop: ma ranges :5mV/1mA, 10A range: 10mV/1A		
AC Current		
Range	Resolution	Accuracy
40mA	10uA	± (1.5% of reading + 5 digits)
400mA	100uA	
10A	10mA	± (3.0% of reading + 10 digits)

mA ranges: F500mA/250V fuse (quick acting),10A range: unfused. Max. Input current:mA jack:400mA,10A jack :10A; Voltage Drop: ma ranges :5mV/1mA, 10A range: 10mV/1A

Resonse: Average, calibrated in rms of sine wave.

Resistance		
Range	Resolution	Accuracy
400 Ω	0.1Ω	
4KΩ	1Ω	
40KΩ	10Ω	± (1.2% of reading + 2 digits)
400KΩ	100Ω	
4MΩ	1KΩ	
40MΩ	10Ω	± (1.2% of reading + 2 digits)

Open Circuit Voltage:0.25V, Overload Protection: 250V or rms AC

Capacitance		
Range	Resolution	Accuracy
4nF	1pF	
40nF	10pF	
400nF	0.1nF	± (3.0% of reading + 3 digits)
4uF	1nF	
40uF	10nF	
200uF	100nF	

Overload Protection: 250V DC or rms AC

Frequency		
Range	Resolution	Accuracy
9.999 Hz	0.001Hz	± (2.0% of reading + 5 digits)
99.99Hz	0.01 Hz	
999.9 Hz	0.1Hz	± (1.5% of reading + 5 digits)
9.999 KHz	1 Hz	
99.99 KHz	10 Hz	
199.9 KHz	100 Hz	± (2.0% of reading + 5 digits)
>200 KHz		Reference only

By Hz Range:
Range: 0 - 200 KHz
Input Voltage: 0.5V - 10V rms AC
By V Range:
Range: 0 - 40 KHz

Input Voltage range: 0.5V - 600V rms AC, Input impedance: 10MΩ

By mA Range:		
Range: 0 –40 KHz, Input current range: 100mA– 400mA rms AC		

Duty Cycle		
Range	Resolution	Accuracy
0.1 – 99.9 %	0.10%	± 3.0%
Note: When measuring frequency, the range by Duty of Hz range is larger than by Duty of voltage ot current range. More to see on the manual book.		

Diode		
Range	Resolution	Accuracy
Diode	1mV	Display: read appromix forward voltage of diode

Continuity		
Built in buzzer will sound if the resistance is lower than 40 Ohms.		

As a Thermometer		
Range	Resolution	Accuracy
0.1℃	0.1℃	–20℃ to 0 ℃	± (5.0% of reading + 8 digits)
		0℃ to 20 ℃	± (3.0% of reading + 8 digits)
		20 ℃ to 400℃	± (2.0% of reading + 5 digits)
0.1℃	1 ℃	–20℃ to 0℃	± (5.0% of reading + 5 digits)
		0℃ to 400℃	± (1.0% of reading + 3 digits)
		400℃ to 1000℃	± (2.0% of reading + 3 digits)

As a Humidity Meter		
Range	Resolution	Accuracy
30 – 90 %	0.10%	± 5.0% RH
Response time: 45% – 90 %RH < 10 Minutes, 90% – 45% < 15 Minutes		

As a Sound Level Meter		
Range	Resolution	Accuracy
30dB – 100dB	0.1dB	± 3.5% dB at 94 dB, 1K Hz sine wave.

Lux Meter		
Range	Resolution	Accuracy
Lux (4000)	1 Lux	± (5.0% of reading + 10 digits) at color temp. 2850K, calibrated to
X 10 Lux (40000)	10 Lux	